

T. W. ADAMS.
 SWITCH SIGNAL.
 APPLICATION FILED MAR. 2, 1910.

975,922.

Patented Nov. 15, 1910.

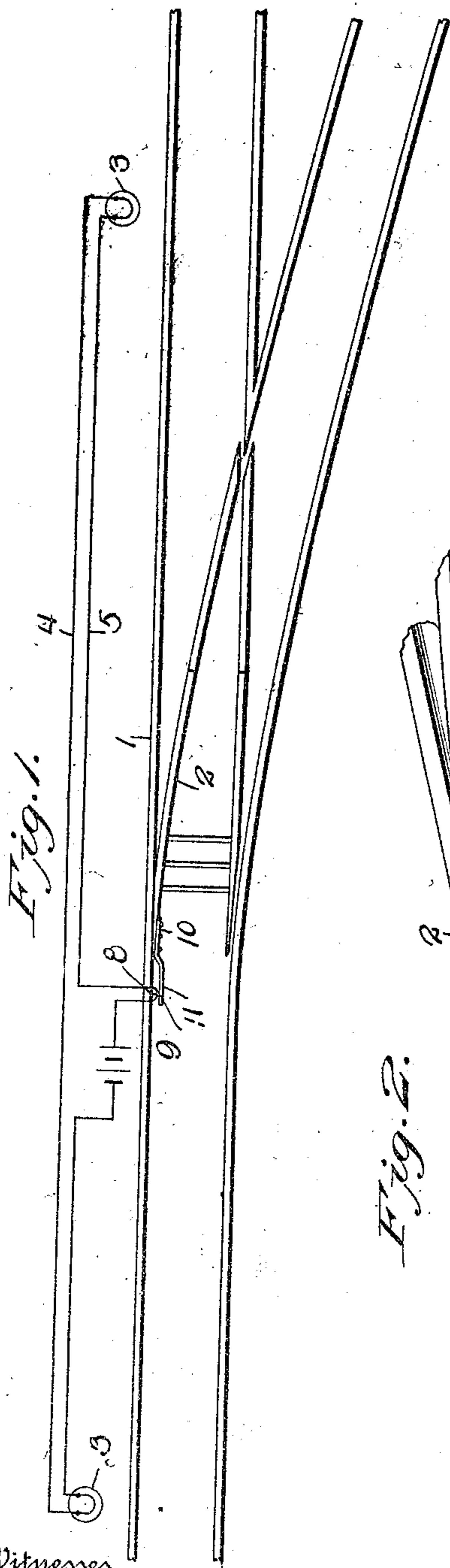


Fig. 1.

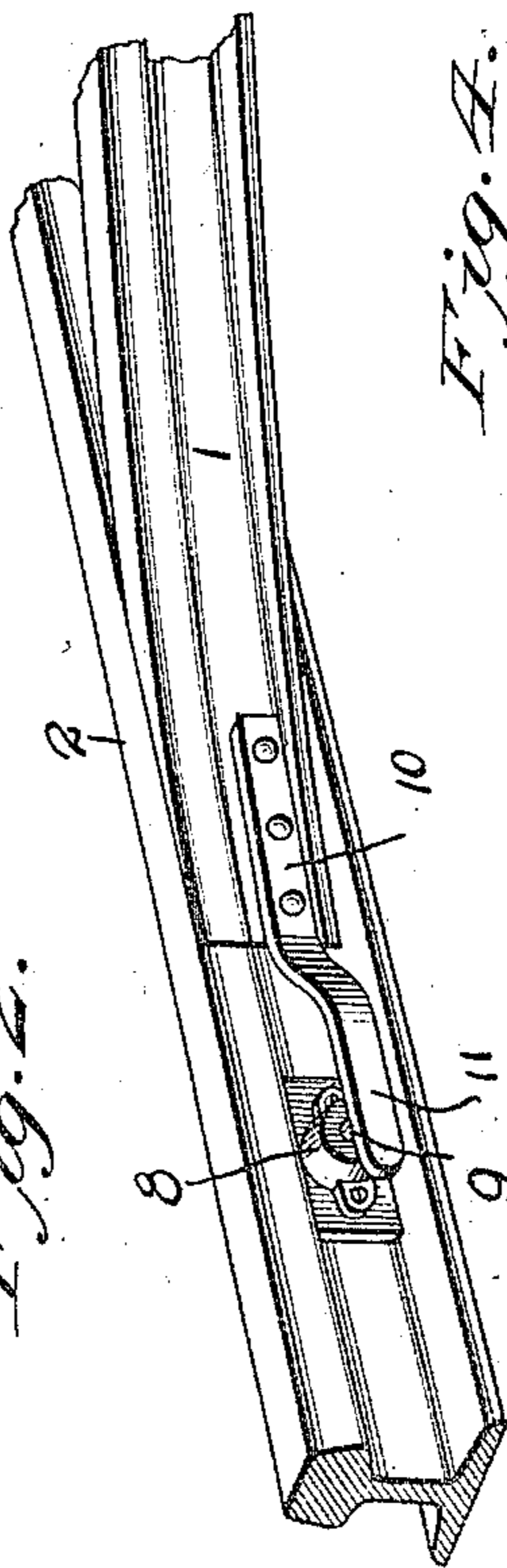


Fig. 2.

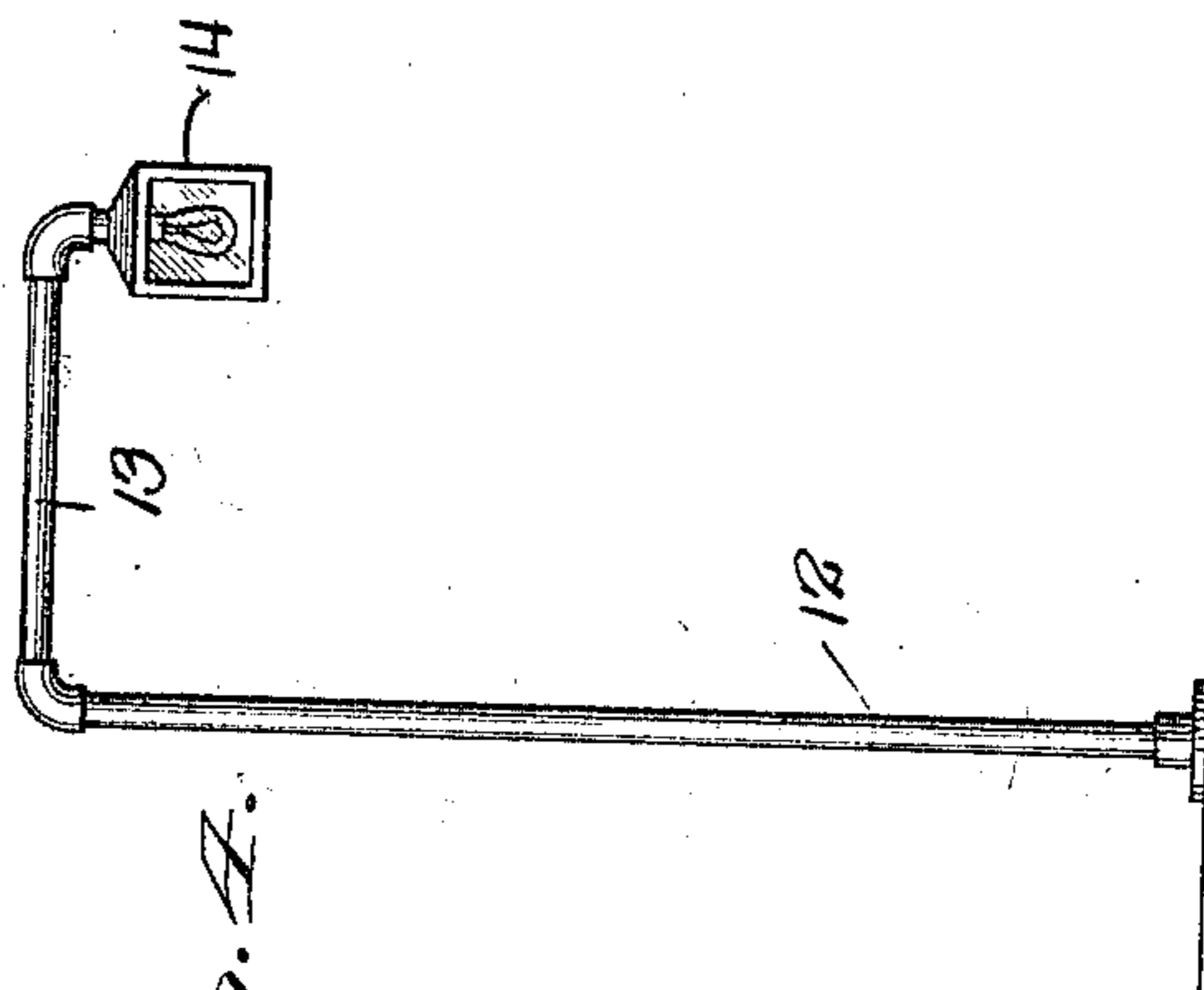


Fig. 4.

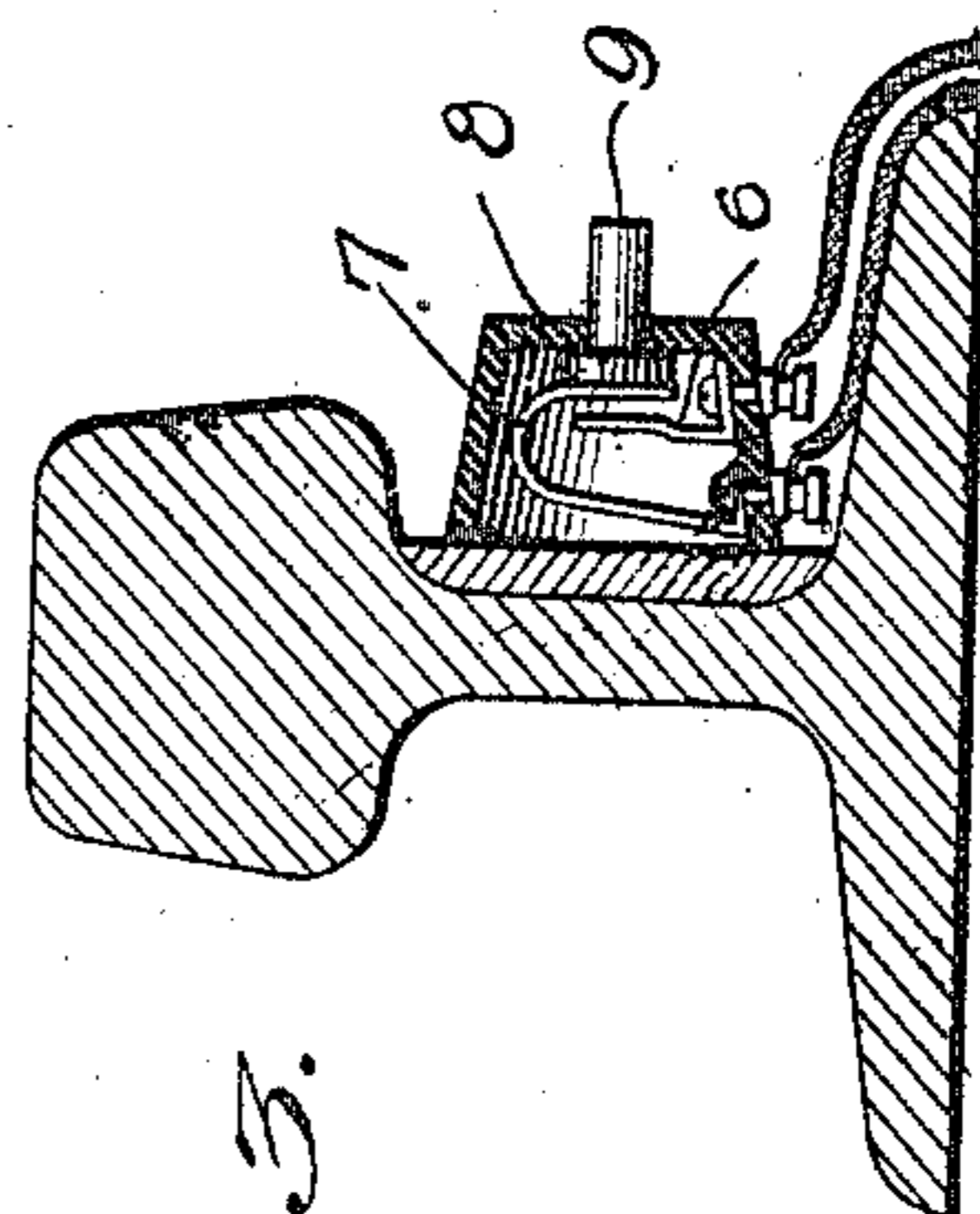


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS WILBURT ADAMS, OF COLLINWOOD, OHIO, ASSIGNOR OF ONE-THIRD TO
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SWITCH-SIGNAL.

975,922.

Specification of Letters Patent.

Patented Nov. 15, 1910.

Application filed March 2, 1910. Serial No. 546,869.

To all whom it may concern:

Be it known that I, THOMAS WILBURT ADAMS, a citizen of the United States, residing at Collinwood, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Switch-Signals, of which the following is a specification.

The invention relates to an improvement in a signal device designed primarily for use in connection with switches, and adapted when in use to indicate at a point remote therefrom whether the switch is open or closed.

The main object of the present invention is the provision of a signal, such as an incandescent light or the like located at a point remote from the switch and included in a normally open circuit, the spaced terminals of the circuit being arranged adjacent the switch and being adapted to be closed to control the circuit and energize the signal when the switch points are operated to produce an undesirable condition on the track on which the train is traveling.

The invention in its preferred details of construction will be described in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a plan illustrating the improvement. Fig. 2 is a perspective view showing the switch point at its operative position to close the circuit. Fig. 3 is an enlarged transverse section through the push button and rail. Fig. 4 is an elevation of the signal.

Referring particularly to the accompanying drawings, my improvement is designed to be applied to rails 1 of the main track and controlled by one of the points 2 of the switch.

For the purposes of the invention I arrange at points remote from the switch and in each direction beyond the same a signal 3, which signals are included in a circuit comprising conductors 4 and 5, the circuit being normally open adjacent the switch points and terminally including strips 6 and 7 arranged within an insulated casing 8 secured to the main rail adjacent the free end of the switch point. The strip 7 overlies the strip 6 and is normally held spaced therefrom by its own resiliency, a button 9 being

arranged to engage the strip 7 and terminally project through the casing 8. An arm 10 is secured to the switch point and formed with a laterally offset terminal portion 11 adapted to engage the push button 9 when the point is set and through the movement of said push button close the circuit to energize the signals 3.

By preference the signals are supported by a standard including an upright 12 and a lateral upper section 13, both of which are hollow for the reception of the circuit wires. The free end of the section 13 supports a casing 14 preferably provided with glass or other transparent sides, and the signal 3 is arranged within said casing and is preferably a red globe, so that upon energization the red or danger signal will be flared from the casing immediately upon closing of the switch against the main track.

The signals 3 are located in opposite directions beyond the switch so that the engineer or other operator can be advised some distance beyond the switch as to the condition of the latter with respect to the main track, it being noted that it is impossible to close the switch proper without closing the circuits and energizing the signals.

Having thus described the invention, what I claim as new, is:—

The combination with a main track and switch therefor of a signal system including a normally open circuit, a signal arranged in said circuit, a circuit closer forming the terminals of the conductors of said normally open circuit, said circuit closer including a plate to be secured to the web of the rail and provided with a casing, spring contacts arranged within the casing, a push button normally projecting through one wall of the casing by means of the resiliency of one of said contacts, and an arm secured to and projecting beyond one of the switch points, said arm being formed with an offset portion to overlie and operate the push button to close the circuit when the switch point is set in a determinate position.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS WILBURT ADAMS.

Witnesses:

GEORGE W. ALBAUGH,
LILLIE BROCKETT.